

REICHERT

CINEPHOTOMICROGRAPHY
with
TIME LAPSE
and
ELECTRONIC FLASH

REICHERT

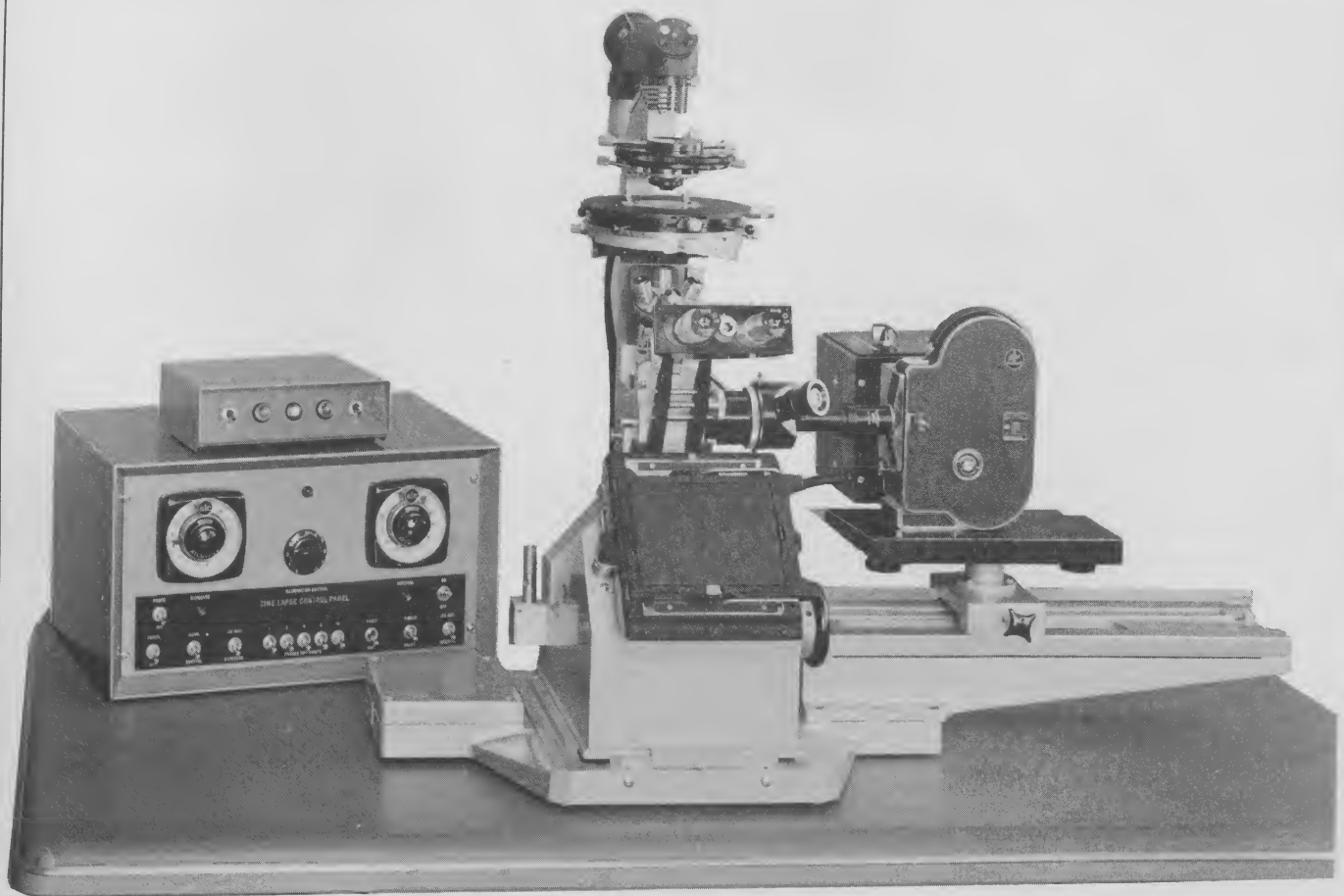


Photo shows the REICHERT Universal Camera Microscope "MeF"
equipped for cinephotomicrography, time lapse control, and micro-flash,
with Bolex 16 mm camera with motor drive

TIME LAPSE CINEPHOTOMICROGRAPHY

The Time Lapse Apparatus described in this bulletin is particularly suited and can be recommended for use with the REICHERT Inverted Microscopes Models "MeF" and "Melabor" and the REICHERT Research Microscope "Zetopan". For a description of these microscopes please consult our respective catalogs. The following major components are needed to equip the mentioned microscopes for time lapse photomicrography:

BASIC CINEPHOTOMICROGRAPHIC EQUIPMENT

consisting of the REICHERT "Kinekonnex" intermediate optics as described in our separate literature.

MOVIE CAMERA

16 mm Cine Camera "Bolex", "Kodak Cine" I or II, or the new "Kodak Reflex".

TIME LAPSE EQUIPMENT

consisting of Time Lapse Control Unit, Camera Drive Unit, and Solenoid Light Cut-Off Device. The versatility of the time lapse equipment permits adaptation to the ever-changing requirements of time lapse photography.

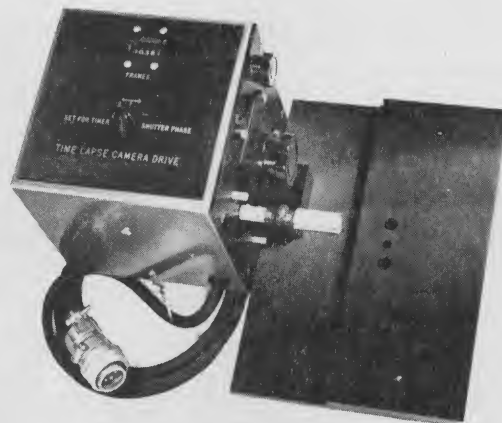
Other Features include:

Plug-in variable timers
Fixed rate interval time
Up to 120 frames per minute
0.25 second exposure
0.25 second interval
Variable rheostat for illuminator control
Anti-doubling circuit

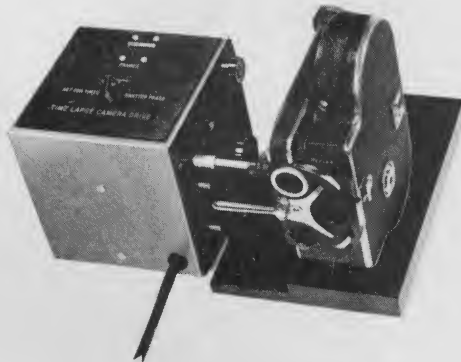
Receptacle for flash unit
Receptacles for accessories
Engraved panels
Grey hammertone steel cabinet
Size 17" x 8-1/2" x 11-1/2"
Controls marked and grouped for convenience
110 Volts, 60 cycles



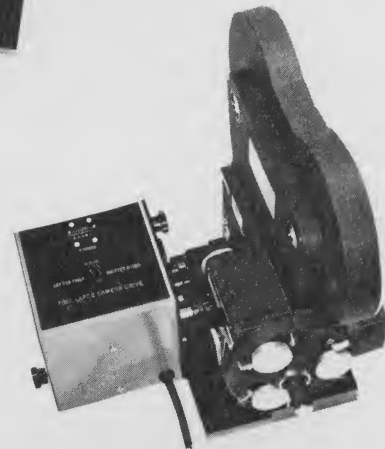
TIME LAPSE CONTROL UNIT



CAMERA DRIVE



with BOLEX



with KODAK

The Camera Drive may be used with the three most popular cameras. All couplings and spacer blocks are supplied for using the Bolex, Kodak Cine I or II, or the new Kodak Reflex.

The Shutter Phase Control eliminates the necessity of removing the drive motor to phase the shutter opening with the exposure timer.

The Cabinet is grey hammertone steel with black anodized and engraved panel. The base and other parts are black anodized aluminum.

ELECTRONIC FLASH UNIT

consisting of the REICHERT "Microflash" unit described in our separate literature.

INCUBATORS

Plexiglass Incubator Housings individually fitted (can be quickly detached), with heating unit (thermostatically controlled), for room temperature and up, with access ports (sphincter-type). Accuracy of the built-in thermostat is $\pm 1/2^{\circ}\text{C}$. The incubator is only furnished when ordered together with our Reichert microscopes.

CONTROL DESK

For utmost convenience and greater efficiency the acquisition of a control desk with built-in electrical controls is recommended.

Specifications and Prices

A. FOR THE REICHERT INVERTED UNIVERSAL CAMERA MICROSCOPE "MeF"

CINEPHOTOMICROGRAPHIC EQUIPMENT for the "BOLEX" 16 mm CAMERA

TABSTA	Optical Bench, all metal design, right hand part, for the REICHERT "MeF"; Swing-Out Deflection Prism with threaded flange for the union nut of the cinephotomicrographic fitting; for deflecting the image forming pencil from the microscope; Cinephotomicrographic Fitting with light-exclusion ring, union nut, swing-out Bertrand lens, beam-splitting prism, focusing orthoscopic observation eyepiece 16x, with reticule showing the frame size and orthoscopic photographic eyepiece 10x; Lens in clip-on mount, for attaching to the observation eyepiece of the cinephotomicrographic fitting; Cinephotomicrographic Lens Flange with lens, "Bolex" thread and light-exclusion ring, magnification factor 1.2x; Camera Carrier, saddle stand for the optical bench, clamping device for the "Bolex"; Filter Attachment with green filter VG 9/2 mm, neutral filter N 1-D 50%, neutral filter N 2-D 25%, neutral filter N 4-D 6.4% "Kinekonex" Combination complete for "Bolex"	733.00
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MOVIE CAMERA

CINCAM	"Bolex" H-16 M-4 without viewfinder, turret and lens	198.00
	In case an "MeF" is already in use, but not equipped with Optical Bench center part please add:	
OBKAE	Optical Bench, center part	151.00

NOTE: For Cinephotomicrographic Equipment for Cine Kodak Special I or II, Cine Kodak Reflex Cameras, and Cine Kodak K-100 Turret Camera (requiring special adapter between camera drive and camera) please ask for our special quotation

TIME LAPSE EQUIPMENT

TIMLAP	Time Lapse Camera Drive Unit Model CD 20A	425.00
LAPCON	Time Lapse Drive Control Model CP 10A with 2 time lapse frame interval controls, variable clock timer mechanism to select frame intervals between 1 and 60 seconds (other timers for interval and exposure control of 3/10 sec. up to 1 hr. available). Second frame interval timer controlled by seven position switch for fixed frame rates of 1, 2, 4, 8, and 16 frames per minute. Exposure times variable between 0.25 and 15 seconds	635.00
SOLCUT	Solenoid Light Cut-Off Device (should be ordered at the same time as the camera drive unit), synchronized with Time Lapse System for instruments equipped with Arc Lamps	125.00

ELECTRONIC FLASH EQUIPMENT

VAAFO	REICHERT "Microflash" Unit, consisting of: Flash tube holder 7572, flash tube 7573, pilot lamp holder with condenser, plastic cap, lamp holder 1112, two low-voltage bulbs 7714, 15 Watts, 6 V., 2.5 Amps., precentered, control unit 7574, for AC only, voltage selector for 110, 150, and 220 Volts, synchronization cable 7575; Filter attachment 7883, 5 filter holders with green filter 8008, neutral filter N1 8187, neutral filter N2 8188, and neutral filter N4 8189	461.40
VAANA	Synchronization cable from time lapse controller to microflash	7.60
KAABA	Condenser front lens 7576, for low-power photomicrography. For full field illumination in incident light using New Polar f/100 mm macrophotography equipment	15.00

INCUBATORS

Please request our special quotation.

CONTROL DESK

MEFDES	Custom built steel desk, 60 x 30 x 29", in grey finish, with leveling adjustment, of solid construction and attractive design, central lock and 2 columns with 3 drawers each fitted for accessories, built-in electrical components, gooseneck desk lamp, convenient control panel at left-hand side	600.00
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B. FOR THE REICHERT INVERTED MICROSCOPE "MELABOR"

Same as for "MeF", but ADD the following item to Cinephotomicrographic Equipment TABSTA:
 OBKAE Optical Bench, center part

\$151.00

C. FOR THE REICHERT RESEARCH MICROSCOPE "ZETOPAN"

CINEPHOTOMICROGRAPHIC EQUIPMENT for the "BOLEX" 16 mm CAMERA

KIZBYT Cinephotomicrographic Tube Head with slide for attaching to the "Zetopan" stand and threaded flange accepting the union nut of the cinephotomicrographic fitting. Compensator slot at 45°. Slot for analyzer or filter slide;
 Cinephotomicrographic Fitting with light-exclusion ring, union nut, swing-out Bertrand lens, beam-splitting prism, focusing orthoscopic observation eyepiece 16x, with reticule showing the frame size and orthoscopic photographic eyepiece 10x;
 Cinephotomicrographic Lens Flange with lens, "Bolex" thread and light-exclusion collar, magnification factor 1.2x;
 Filter Slide, 5 mm thick, 5-position with neutral filter N 1-D 50%, neutral filter N 2-D 25%, neutral filter N 4-D 6.4%
 Camera Stand, with base plate 45 x 45 cm, with female dovetail slide, vertical column, swing-out rack and pinion driven rail guide adjustable to height, with clamping device and prismatic bar, antivibration mount;
 Microscope Location Stops, adjustable to fit the base plate of the camera stand, set of 3;
 Camera Carrying Arm with clamping device for the prismatic bar, to take "Bolex"
 "Kinekonnex" Combination complete for "Bolex"

1,130.30

MOVIE CAMERA

CINCAM "Bolex" H-16 M-4 without viewfinder, turret and lens

198.00

NOTE: For Cinephotomicrographic Equipment for Cine Kodak Special I or II, Cine Kodak Reflex Cameras, and Cine Kodak K-100 Turret Camera (requiring special adapter between camera drive and camera) please ask for our special quotation

TIME LAPSE EQUIPMENT

TIMLAP	Time Lapse Camera Drive Unit	)		425.00
LAPCON	Time Lapse Drive Control	)	same as for the "MeF"	635.00
SOLCUT	Solenoid Light Cut-Off Device	)		125.00

ELECTRONIC FLASH EQUIPMENT

VAABY REICHERT "Microflash" Unit consisting of:
 Flash tube holder 7572, flash tube 7573, pilot lamp holder with condenser, plastic cap, lamp holder 1112, two low-voltage bulbs 7714, 15 Watts, 6 V., 2.5 Amps., precentered, control unit 7574 for 110/120 Volts AC, voltage selector for 110, 150, and 220 Volts, synchronization cable 7575;
 Filter slide 7954 with neutral filter N1 8187, green filter G1 8185, and green filter G2 8186;
 Filter slide 7954 with neutral filter N2 8188, neutral filter N4 8189, and neutral filter N6 8190

477.70

VAANA Synchronization cable from time lapse controller to microflash

7.60

INCUBATORS

Please request our special quotation.

CONTROL DESK

MEFDES Custom built steel desk, same as for "MeF"

600.00

PRICES IN EFFECT AT TIME OF SHIPMENT WILL APPLY - E. & O. E.

TERMS: FOB CALDWELL, N.J. - 1% 10 DAYS, NET 30 DAYS

PRICES AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

OTHER INSTRUMENTS FOR BIOLOGICAL SCIENCES**Reichert
MICROSCOPES**

Monocular Routine "Monopan"
Binocular Routine "Neopan"
Laboratory "Biozet"
Research "Zetopan"
Fluorescence Microscopy
Inverted Camera "MeF"
Inverted "Melabor"
Phase and Anoptral Contrast
Interference Contrast
Projection
Polarizing Routine "RCP"
Polarizing Research "Zetopan-Pol"
Stereoscopic (3-dimensional)

MICROSCOPE ATTACHMENTS & ACCESSORIES

Objectives & Eyepieces
Illuminators and Microflash
Photomicrographic Cameras and Exposuremeters
Cinephotomicrographic Apparatus
Microphotometer
Biological Hot Stage "Biotherm"
Image Shearing Eyepiece
"Kofler" Hot and Cold Stages (-80° to +350° C)

**Reichert and Jung
MICROTOMES AND ACCESSORIES**

Ultra-Microtome "Om U2" for Electron Microscopy
"Tetrander" (Lung, Brain)
"K" (Bone, Teeth)
"L" Immserion (Brain)
Rotary Serial Sectioning "1120", "OmS"
Clinical Freezing "1200", "1205", "OmP"
Automatic Sliding "OmE"
Hand (Cylinder) "OmZ"
Microtome Knives
Microtome Knife Sharpeners

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